Name: \_\_\_\_\_\_\_\_\_\_\_\_\_

Lab Partner: \_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_

Group A B C

Color Lab

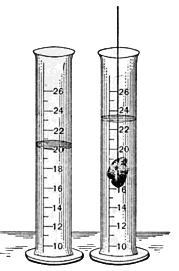
**Purpose** :

* to develop skills measuring chemicals with a graduated cylinder.
* to practice using the metric system.
* to test precision and ability to follow directions.
* to practice lab safety procedures.
* to discover the parts of a lab

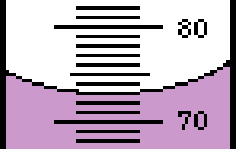
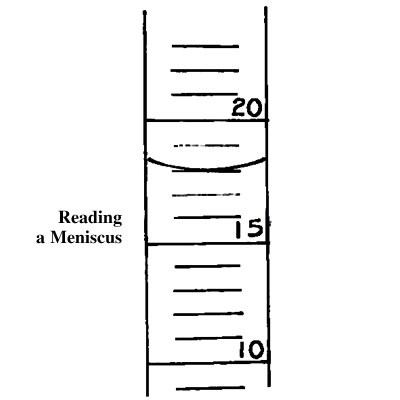
**Research:**

1. Participate in the class demonstration on how to use a graduated cylinder.

Circle the meniscus in the image.



1. Read the following volumes below.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ mL \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ mL \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_mL



1. Complete the table below.

**Table 1: Information about equipment used in color lab**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | http://dorchester.schoolfusion.us/modules/groups/homepagefiles/cms/478113/Image/Michelle%27s%20Pictures/Testtube2.gif | http://justenoughmarketing.com/wp-content/uploads/2010/01/EyeDropper2.jpg | http://ritter.tea.state.tx.us/student.assessment/resources/online/2003/grade5/science/p53no3a.gif |
| Name of Object |  |  |  |  |
| Is it accurate? |  |  |  |  |
| What is it used for? |  |  |  |  |

**Teacher Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Materials:**

6 test tubes 4 50-100 mL beakers tape red liquid

test tube rack 25mL graduated cylinder sharpie blue liquid

1 eyedropper 10 mL graduated cylinder lab apron yellow liquid

goggles

**Procedure :**

**Part 1 :**

1. Label 6 test tubes in order : A, B, C, D, E & F.
2. Into test tube A, measure 25 mL of RED liquid.
3. Into test tube C, measure 17 mL of YELLOW liquid.
4. Into test tube E, measure 21 mL of BLUE liquid.

**Part 2 :**

1. From test tube **C**, measure 4 mL and pour into test tube **D**.
2. From test tube **E**, measure 7 mL and pour into test tube **D**. Swirl.
3. From test tube **E**, measure 4 mL and pour into test tube **F**.
4. From test tube **A**, measure 7 mL and pour into test tube **F**. Swirl.
5. From test tube **A**, measure 8 mL and pour into test tube **B**.
6. From test tube **C**, measure 3 mL and pour into test tube **B**. Swirl.
7. Save your results . Measure the contents of each test tube and record how many mL were found in each test tube.
8. Fill in the table.
9. Clean your lab bench.

**Data :**

**Table 2 : Test Tube Results**

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Tube** | **Color of Liquid** | **Amount of Initial Liquid (mL)** | **Amount of Final Liquid (mL)** |
| **A** | http://www.middleschoolscience.com/clearW.gif |  | http://www.middleschoolscience.com/clearW.gif |
| **B** | http://www.middleschoolscience.com/clearW.gif |  | http://www.middleschoolscience.com/clearW.gif |
| **C** | http://www.middleschoolscience.com/clearW.gif |  | http://www.middleschoolscience.com/clearW.gif |
| **D** | http://www.middleschoolscience.com/clearW.gif |  | http://www.middleschoolscience.com/clearW.gif |
| **E** | http://www.middleschoolscience.com/clearW.gif |  | http://www.middleschoolscience.com/clearW.gif |
| **F** | http://www.middleschoolscience.com/clearW.gif |  | http://www.middleschoolscience.com/clearW.gif |
|  |  | **Total liquid Test Tubes A-F** | **mL** |

**Analysis/Results: (Use complete sentences)**

1. Name three ways you stayed safe during the lab.

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1. Name the colors that you created.

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1. Why is it important to follow directions **exactly**?

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1. What would have happened if your measurements were not correct?

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1. Look at your hands. Do you have any stains on your hands? If so, those stains represent **chemicals** that would be on your skin **right now**! What can you do to prevent stains?

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1. How many mL of liquid did you have at the end of the lab?  How many should you have?  What are some reasons why you may have more or less than when you started?

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**Conclusion**:

Write a paragraph on what you learned in this lab.

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**Sources**

LaRosa. Liz. “Rainbow Lab.” *Middle School Science.* Accessed August 22, 2010. <http://www.middleschoolscience.com/rainbowlab.html>

**“**Meniscus Madness”. *Morisson Labs.* Accessed August 22, 2010. <[**http://morrisonlabs.com/meniscus.htm**](http://morrisonlabs.com/meniscus.htm)**>**